DEVOTED TO AGRICULTURE AND ALL ITS VARIOUS KINDRED ARTS AND SCIENCES.

Honor waits, o'er all the earth, The art that calls her harvests forth.—BRYANT.

VOL. I. SATURDAY, APRIL 28, 1849. NO. 10.

S. W. COLE, EDITOR. QUINCY HALL, BOSTON. J. NOURSE, PROPRIETOR.

AGRICULTURAL EDUCATION.

On the 13th, the last agricultural meeting was held at the State House. Hon. M. P. Wilder in the chair. Subject, Agricultural Education.

The president said, that the subject was of vital importance to the whole community, for on the success of the farmer the prosperity of all other professions must depend. The science of agriculture should be placed on a par with every other department of art and education. He alluded to the movement in the legislature of New York on this subject.

Hon. Mr. Calhoun remarked that the commonwealth of Massachusetts had liberally sustained schools, academies, and colleges, which were an honor to her, and a commendable spirit was now aroused on agricultural education, and this spirit may be relied upon in sustaining the cause of agricultural education. There is less difficulty in this than in other branches of education, now in successful operation in our state. We have schools for the instruction of the blind and the deaf, and establishments for improving the condition of idiots and lunatics. As farmers now enter upon their business without suitable instruction, a great deal of time is lost, and much is learned wrong by hasty observation. But if a right start is taken, they will not be subjected to a thousand experiments in order to learn what should be imparted by a good education. There is no calling in which science may be so successfully employed as in agriculture. Sir Humphry Davy wrote on agricultural chemistry fifty years ago, and he has been followed by Liebeg and others of eminence, and much scientific knowledge had been disseminated in Europe, and there is no reason why we should not avail ourselves of the same advantages. In England and Germany agricultural schools are in successful operation, and their utility is acknowledged. As the young farmer turns up the sod, he knows not the elements that compose it, nor the manures it requires, nor to what crops it is adapted. A little accurate knowledge would be of great service to him. In our schools and seminaries of learning we get an education that fits us for every calling excepting that of the farmer. The subject has been before the legislature, but they have done nothing in furnishing means as in the establishing other schools.

Hon. Mr. French, of Braintree, thought that the community were becoming alive to this subject, and there could be no question that there was a great want of accurate information, which our schools and colleges do not supply, as agricultural education does not enter into our systems of instruction. We should have agricultural schools where a young man may work on a good constitution and fit himself for pursuing his profession with pleasure and success. If a school was established, it would soon be furnished with a large number of students. At present, the great error at our seminaries of learning is, that students study too hard, and take too little exercise. In an agricultural school, exercise and study would be combined, imparting instruction and health.

Hon. Mr. Leonard, of the Senate, believed that an agricultural school would be a benefit to the commonwealth. He referred to the aid that agriculture had already received by means of the sciences.

Mr. Teschemacher, of Boston, believed that there was already too much education for the learned professions, and he was opposed to any more facilities for this purpose, until provision was made to educate the farmer to cultivate the soil from which he must get his livelihood, and learn its peculiar elements, and its adaptation to particular crops. He was opposed to doing any thing more for colleges until agriculture was represented in them. In England there is a great difference in the products of an acre of land, and mutton, butter, and other productions sell at very different prices. This is not the result of chance, but the application of greater skill in the production of crops. Every youth, who would get accurate knowledge of agriculture, should be furnished with advantages for this purpose.

Dr. Wilder, of Leominster, thought that every one could do something to give importance to agriculture, and impressing it early on the minds of children. Teachers and parents may do much by instructing children in the rudiments of agriculture, and thus lay a foundation for agricultural schools, where their education may be completed.

Deacon Grant, of Boston, had learned to estimate

the value of agricultural knowledge from the success attending the boys who had been instructed at the Farm School.

Hon. Mr. Gray, of Boston, was of the opinion of Dr. Wilder, that the young should be instructed in agricultural education. He thought that instruction in agriculture might be given in our colleges. We need works to teach the elements of agriculture.

On motion of Mr. Calhoun, it was *Resolved*, that it becomes the enlightened policy of Massachusetts to aid in furnishing to the people the means of a thorough agricultural education.

NOTICES OF PUBLICATIONS.

Hovey's Magazine of Horticulture, for April, as usual, contains a variety of interesting matter. Mr. Hovey is among the most industrious and persevering pomologists in the country.

A Practical Treatise on the Management of Fruit Trees, by George Jaques, published by E. N. Tucker, Worcester. This is a small work, containing useful directions, with a descriptive list of such fruits as the author considers adapted to the interior of New England. Even those who prefer more definite descriptions of fruit, and an account of the principal kinds cultivated in the country, will find valuable hints in this work on cultivation and management.

Report on Agriculture, by the committee on agriculture, in the New York Assembly. A valuble document, extracts from which appear on p. 159.

ACKNOWLEDGMENTS.

From Mr. Nathan Waters, Sutton, Beauty, or Sutton Beauty. This apple, in form, size, color, and season, is similar to the Baldwin. Yet it is of a more delicate and beautiful appearance, of fine texture, more mild and delicate in its flesh, which, in our opinion, renders it superior for the table. We have tried and described this fruit before, but we never made a fair trial of it, as we have not had it till too late in the season to judge accurately of its quality. We find that it is a stout, vigorous grower in the nursery. It is worthy of trial, and promises to be one of our most valuable winter apples.

Of Mr. George Phipps, Framingham, Winter Sweet apple. Medial size, round, ribbed, yellow, with a brownish red blush; flesh very firm, and of a pleasant, lively flavor, after long keeping.

Of Mr. Lewis Jones, Wayland, Jones's Sweet apple. Large, round, yellow, dull brown blush, of a pleasant quality. These noble apples make a fine appearance at this late season; but Mr. Jones says, that it requires high culture to bring them up to so fine a condition.

Of Mr. J. Waters, from his father, Stephen Waters, of Sutton, Sutton Export apple. Medial size, roundish oblong; yellow, russet, and red; flesh, very hard, of a pleasant flavor; but it is not sufficiently ripe to allow us to judge correctly of its quality. Mr. W. makes the following remarks on this fruit:—

Mr. Cole: I herewith send you some specimens of an apple which I have christened the Sutton Export, from the fact, that I think there are no apples now extant which are equal to this for exportation, or for holding their hardness and flavor to a very late period in the season. I have kept them without assorting over until August, when they would come out fresh and fair, with very few rotten, retaining all their qualities, as though they had but just arrived at maturity. They are, however, eatable as early as January, although quite hard. The tree is hardy and rugged, and I think peculiarly adapted to our New England culture and climate. It is a constant and prolific bearer, and such is the wonderful tenacity with which the fruit clings to the tree, that they successfully resist the storm and wind, and even the efforts of boys with clubs and other missiles are not sufficient to detach them. To make an attempt to eat the fruit in the fall would be in vain, for it would be almost impossible to make an indenture with the teeth; and in fact it is hard to bruise or make an impression upon them at this time of the year, which peculiarly adapts them to exportation. You will please have the goodness to test these apples thoroughly, *particularly the flavor* — how they will compare with others, &c., and oblige S. W.

EXERCISE OF THE MIND.

Persons who are much employed in pursuits involving manual labor are apt to undervalue the necessity of exercising their minds more fully than the mere thinkings immediately connected with their pursuits. To such we would say, your power of applying your mind intently to any subject will be in exact proportion to the amount of exercise you have given it.

The arm of the blacksmith, or the leg of the dancing master, increases in size by its exercise, and the brain of the lawyer gains activity and strength from a similar cause.

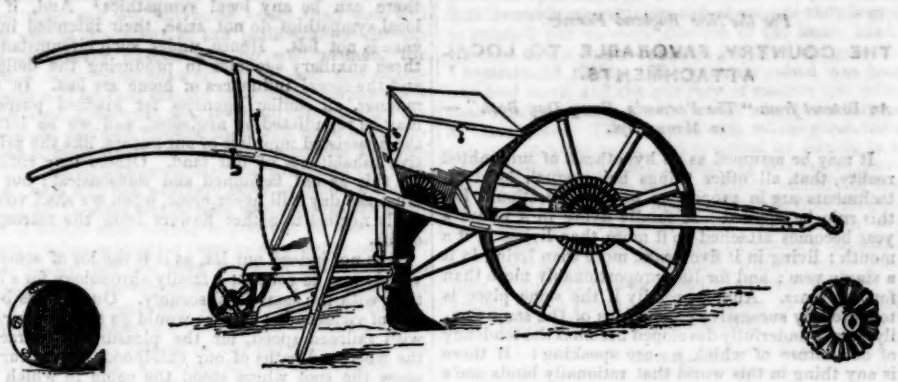
Even the eye may be improved in the exercise of its functions by use. Thus the artist and the dealer in dry goods both remember and observe colors with greater exactness than those not so employed.

Go to our prisons and observe those who have worked in silence for many years at some monotonous occupation, without the opportunity of listening to conversations, or of referring to books, without change of scene or other cause for the exercise of thought, and you will invariably find that they have lessened in the power of thinking; their memories, and indeed every quality of their minds, will be found to have deteriorated.

With such facts as these fairly ascertained, is it not both slothful and sinful for farmers to doze away their evenings in a sort of half consciousness, and then retire to bed like tired beasts of burden, instead of spending a single hour, at least, each evening, in a healthy and proper exercise of their minds.

If this exercise have relation to the affairs of the farm, arising out of judicious reading, you will profit more by it than from a similar amount of bodily exercise. Indeed, its beneficial effects will pervade all your doings.

The necessity for this advice is rapidly passing away; but we all know that our industrious farmers have been too apt to over-labor and under think — excusing themselves for such negligence by urging their fatigue as the cause. Farms of any extent require that the person having them in charge should not so over-labor, as to have no time for thought. One hour per day, applied to reading agricultural improvements, will give rise to methods for saving more than the value of the time so spent, in addition to its beneficial effect on the mind. — *Working Farmer.*



THE IMPROVED SEED SOWER AND PLANTER.

A good seed sower is a labor-saving machine, of great utility to the farmer or gardener, who sows or plants many small seeds. With the ground well prepared, and a suitable machine, one hand will sow seed as fast as four or five men without a machine, and the sowing will be more uniform than that done by hand.

This machine is light, and it is pushed forward by the operator; the ground is opened, the seed dropped, covered, and rolled, in one operation or passing. This useful implement is adapted to seeds of various sizes; to sowing seed thinly, or plentifully, as desirable; and the rows or drills may be of any distance apart.

By change of cylinders, this apparatus may readily be adapted to large or small seeds. The gearing, for the purpose of producing a rapid or slow motion, in order to adapt the machine to different kinds of seed, is very simple, yet excellent, as it will sow continuously in drills, or drop in hills. This gearing is made of iron, with graduated rows of cogs, and it works with great precision; it is very durable, and not liable to get out of order.

BLACK POLAND TOP-KNOT FOWL.

These, like the brave people from which they derive their name, are every way commendable, and are recommended to the "chicken fancier."

The Poland fowls, as they are generally called, were, according to English authors, said to be imported from Holland. Their color is a shining black, with a white top-knot of feathers, on the heads of both cock and hen.

The head is flat, and surmounted by a fleshy protuberance out of which springs the crown of feathers, or top-knot, white or black, with the fleshy King David's crown, consisting of four or five spikes. The true breed is rather above the middling size; their form is plump and deep, and the legs of the best sorts are not too long, and most have five claws. The contrast of the perfectly white crest with the black plumage is truly beautiful; but the top-knot of the cock differs from his hen, hers being broad and erect feathers, while his are narrower and hanging down in every direction.

Mowbray says, "The Polanders are not only kept as ornamental, but they are of the most useful varieties, particularly on account of the abundance of the eggs they lay, being least inclined to sit of any other breed, whence they are sometimes called *everlasting layers*, and it is usual to set their eggs under other hens. They fatten as quickly as any other breed, and in quality similar to the Dorking; their flesh perhaps more juicy, and of a richer flavor." They are a quiet, domestic fowl, neither quarrelsome nor mischievous, and their eggs of good size, fine flavored, and thin shells. — *Bement's Poulterer's Companion.*

Howard B. Coffin, Newton Corner, has a lot of the above named fowls, and can furnish eggs to any one who wishes them for hatching, if their orders are left at No. 5 Congress Square, Boston. — *Com.*

THE APRICOT.

"Does the apricot produce fruit without budding?" We supposed that it was generally known that apricots would produce fruit without budding, in the same manner as other fruit trees. In this vicinity are a number of apricot trees, of superior quality, that have not been budded. The opinion that the apricot does not yield fruit without budding may have arisen from the numerous failures in this species. The buds are very liable to be killed in the cold season. It flowers very early, more so than other fruit trees; hence the blossoms are liable to be killed. If the buds and blossoms escape injury, the curculio is liable to sting and destroy the fruit at an early stage.

SECKEL PEAR.

It may be a matter of interest to nursery-men and fruit-growers to know that the original Seckel pear-tree, the parent of all the Seckel pears in the United States and in Europe, is still standing — a venerable inhabitant of a meadow belonging to the city of Philadelphia, in Passayunk, on the Delaware River, near the mouth of the Schuylkill, three and a half miles below the city. It is a large tree, about thirty feet high, and measuring six feet in circumference a foot from the ground. The trunk, however, is much decayed, and it is thought that it cannot long withstand the wintry winds that annually sweep over the peninsula between the Delaware and Schuylkill Rivers.— *Valley Farmer.*

For the New England Farmer.

THE COUNTRY FAVORABLE TO LOCAL ATTACHMENTS.

An Extract from "The Farmer's Every Day Book" — in Manuscript.

It may be assumed as an hypothesis of undoubted reality, that, all other things being equal, local attachments are in proportion to their duration. Let this rule be applied. A family living in a house a year becomes attached to it more than living in it a month; living in it five years, more than living in it a single year; and for life, proportionably more than for five years. And, especially if the same place is tenanted by successive generations of the same family, how wonderfully developed becomes the tendency of our nature of which we are speaking! If there is any thing in this world that rationally binds one's affections to it, if there is any thing that imparts a philosophical dignity to life, it is living for successive years, or through life, in competence and without solitude, sharing with the same dear family circle the mansion of a past generation. What varied associations cluster around the fireside and the household altar! The hours of morning twilight, the pensive and the mellowed shades of evening, and no less the dark watches of midnight, are alike flooded with soothing recollections.

In the country, upon the tidy and well cultivated farm, such associations and such recollections convert the whole of surrounding nature into a fairy scene, on which the imagination never becomes wearied. If the starry and the moonlight heavens any where shed over the human sensibilities a delightful emotion, it is here! If a landscape of hill, and dale, and waving shadow, any where captivate the eye, it is here! If the murmuring rill, and the falling cascade, and the distant echo of some disturber of midnight silence, any where send a thrilling pathos to the soul, verily it is here! Here the children were born! Here, amidst pure breezes and serene skies, they are nurtured in body and mind! Here, in God's first temple, they are taught to lisp his praise! Here, away from the loathings of vice, they receive the elements of useful knowledge! Here, in rustic simplicity, their manners are formed! Here, always at home, what can diminish the vigor of their natural affections?

It is difficult to imagine what there is in the city, analogous to all this, to operate on the social affections. Persons of sufficient means, in the city, may, and do, occupy good houses; sometimes it may be princely mansions, provided also with expensive furniture; but is there any thing in such establishments to produce this strong local attachment? It appears to us that such establishments produce about the same effect on the mind of the occupants, so far as our present subject is involved, as the gilded scenery of the playhouse. A sensation of delight is felt at the moment; but with the occasion it is all forgotten. How can it be otherwise? They have no permanent interests there. They can feel no possible identity with them. They live in one house one year, in another the next year, and so on through life, leaving each in turn with as little thought or regret as they would step out of a railroad car in which they had journeyed a few miles. Their furniture also, instead of being preserved for a lifetime, and cherished with affection as in the country, is cast aside, and new substituted in its place, with the unconcern of casting away a pair of old shoes. In going from house to house, they go from street to street in the same unconcerned manner.

Now, is it possible that, in such a whirl and change, in such a perpetual transition from place to place, there can be any local sympathies? And, if the local sympathies do not arise, their intended influence is not felt. Hence, under such circumstances, these auxiliary agencies in producing the delights and the moral influences of home are lost. In like manner, all similar agencies for kindred purposes may be repudiated or neglected, and we be left to the unassisted impulses of our nature, like the primitive inhabitants of our land. Others may ridicule all this as old fashioned and nonsensical; but we trust the day will never come, when we shall voluntarily neglect to gather flowers from the retrospect of life.

It is not indeed our lot, as it is the lot of some favored ones, to connect a family chronology for a lifetime with the same local scenery. Our lot has been one of vicissitude; but we would go a day's journey with railroad speed, for the pleasure of retracing the woodland paths of our childhood, and to survey anew the spot where stood the cabin in which we were born. Save that cabin, all around is a perfect daguerreotype of those early days! Here the sacrilegious hand of modern improvement has committed no depredation! Close by stands proud Agonock, scowling and frowning as of old; his equanimity, to appearance, not having been disturbed since the time of Noah's flood! At his feet is spread out dear Suncook, mild and placid like a sleeping infant. On its shores we were wont to bathe and fish; and here we would again gather pebbles, casting one by one upon her silvery bosom, causing rimple after rimple, not unlike the pulsations of the virgin queen, whose name it bears! Sadness would indeed rise up before us; for the graveyard could alone tell us of the human forms with which we were accustomed to commune! It would be good to resort thither; for in that silent spot hopes of heaven would kindle, and of friendships there to be renewed and made perfect.

Who could count the thoughts that in one short hour would there flit across the mind? or what painter could delineate the images that would, as it were, rise from the ground and dance before the mental eye? What sympathetic being can say, it would not be good there to bring up such reminiscences of a long track of years, all but blotted from human recollection, and to rembody visions, reaching into the unseen future in that undying world, where the pure in heart can alone enter? Can those born in the growing city, after the lapse of half a century, thus gather food for the soul; thus retaste the sweets of childhood; thus feel anew the buoyancy of youth; and thus be assisted in their aspirations after the land, not to be warmed and cheered by the light and the heat of the material sun? being overshadowed by the glory of the Ancient of Days; the land whose waters will be the rivers of salvation, and whose bread will be the unfailing essence of immortal existence and plenitude! FLEMING GROVE.

ORANGE, N. J., *March* 28, 1849.

For the New England Farmer.

THE GARDEN.

Farmers, have you made preparations, this spring, for the healthful luxuries of the garden, its rich fruits, its crisp, and tender vegetables? If not, you are denying yourselves and families of many of the healthful condiments which nature has kindly provided, and which man has collected from various climes, and acclimated in your own, for your special benefit. "But this gardening is small work," says one: "I don't wish to spend my time weeding onions and beets and tending bushes. I raise cabbage and

potatoes; they are enough for me." Go and enjoy them then, say we, but those wiser than you will look well to the thrift of the garden, their currant and gooseberry bushes will be well pruned, the ground well manured, well forked, and the consequence will be, that instead of depending upon a few dried apples, for pies, &c., to fill up the vacancy between old and new apples, they will have an abundance of fresh fruits for culinary purposes through that period, or a succession of fruits through the year. Now, who will not willingly labor to produce such a result, or, in other words, who would forego the comfort it brings after having enjoyed it for one season. "But it takes so long for them to come into bearing!" Dear reader, did you ever know an individual that complained of its taking so long for a tree or bush to grow, that was proverbial for success in any thing?

We have known two individuals, educated at the same school and settled in the same neighborhood. One of them, Mr. A., in the days of his boyhood was forcibly impressed with the beauty of a well conducted garden; but when he tasted of its delicious fruits and vegetables, his admiration ran so high, that he resolved on having a garden of his own. His first labor was to eradicate the pigweed and beggarlouse in the premises where his father had planted "potatoes and a few cabbage," and then, by a thorough manuring, ploughing, and laying out, to prepare the ground for future operation. Asparagus, currant, gooseberry, and raspberry bushes were introduced when convenience aided the operation; that noblest of all substitutes for a good apple pie, the rhubarb, was planted in a rich niche; the strawberry bed, too, claimed a place both for variety and luxury; and, after being properly cared for only two short years, — a period which to most men, especially the can't do's and can't waits of the world look in the retrospect as a dream, a period of which they have an indefinite recollection, — all these things were in maturity, and amply, yea, in a thousand fold, repaying all the cost and labor bestowed on them.

So, too, with vegetables. Early potatoes were introduced to take the place of the tardy "long Johns;" and though the cabbage plat received due consideration, the broccolis and cauliflowers came in to claim a share of merit by its side. Indeed, every comfort, every luxury a garden can afford, in two years from that annihilation of gross and unseemly weeds, found a place there. In consequence, better health was the result of this increase of comforts, and cheerfulness and hilarity of spirits took the place of moroseness and turbulence of feeling. And do you suppose that a great demand on the young farmer's time was created by this new accession of the useful and beautiful? Time it certainly does require to nurture and bring so fine an array of plants to maturity as young farmer A. now possessed; and so it requires time to secure and attain any valuable object. But the time necessary to cultivate a garden may with most farmers be made up of the thrumbs and odd ends of other employments; and a man of persevering energy will accomplish much, almost produce a new creation in the odd spells which others will spend in folding their arms and whining because it takes so much time to accomplish any thing. W. B.

April, 1849.

For the New England Farmer.

LIQUID MANURE FOR CELERY.

I raised my celery last year in the following manner, and with the best success that I ever had. I made my onion beds six feet wide, with alleys between, of about one and a half feet in width. The latter part of June, I took strong liquid manure, wet those alleys, and then dug them up, two or three inches deep; and in the course of a week or two I went through the same operation again. I then set the plants the first favorable opportunity, and as soon as they began to grow, I put on more manure of the same kind. As soon as the onions could be got off of the ground, I commenced tilling. The quantity raised was four hundred roots, and the quantity of manure not more than a boy twelve years old would wheel in a barrow at three times. The manure was taken green from the cow or horse stable, and prepared by mixing in a half hogshead tub. I attribute my success to having all the manure in the immediate vicinity of the roots, and the earth to bleach with free from manure to cause rust. The celery was large enough, say three feet long. A quantity of manure prepared and used in the above manner will do more good than in any other way that I have ever tried it. I set my tub in the ground and choose to let the manure stand a few days after mixing. B. F. C.

For the New England Farmer.

AGRICULTURE OF MASSACHUSETTS.

Mr. Cole: In glancing the eye hastily over the pages lately published under the direction of the secretary of the commonwealth, there appears much reason to class this among the most useful of the state publications. It comes nearer home to the business and interests of the major part of the community, than any other. The inequalities in the returns from different counties are quite apparent. Would those intrusted with the preparation of these reports but reflect a little on the opportunity afforded to disseminate useful information, they might make them even much more valuable than they are.

It would seem from the communication under the authority of the trustees of the Massachusetts Society, that their efforts *at present* are limited to the improvement of our stock, by crossing them with the best imported animals — those reputed to be "pure blooded." That much benefit may come of this, if properly directed, we cannot doubt; but that this is the only subject worthy the patronage and care of a society so enlightened, the first organzied in our country, we shall be slow to believe.

While the Massachusetts Society are limiting their attention to the introduction of the pure blood of foreign animals, we find the New York State Society extending their operations to every branch of culture. Notwithstanding the *dictum* of Governor Wright, quoted by Mr. Phinney, to the contrary, we cannot doubt that the mode pursued by the latter is the more truly philosophical. Some will be interested in one form of improvement, others in another; — the greater the variety of forms, therefore, the more enlarged will be the interest.

If we rightly understand the report of the trustees, about half a dozen pure-blooded animals have been quartered in different counties of the commonwealth, in the hope of thereby changing the character of the breed of animals in those sections. If the superiority of these animals shall be so conspicuous as to satisfy our farmers that none but their progeny are worth raising, the result anticipated may be attained. But until this conviction is brought upon their minds, I should as soon think of freeing our country of the blood of the African race, by the operation of Mr. Clay's fanciful theory of emancipation.

It may be true that "a little leaven leaveneth a whole lump," — but the principle is not applicable in the propagation of animals. On the contrary the peculiarities of the few will be much more likely to be absorbed and obliterated in the general mass. What though a fraction of *an eighth* or *a sixteenth* remain after as many crossings in this fraction to control and give character to the remainder? We would not discourage any rational experiments to

promote improvements; but we must confess, in the scheme proposed, our fears exceed our hopes.

ESSEX.

For the New England Farmer.

TO PREVENT BLEEDING IN THE GRAPE VINE.

Mr. Cole: I noticed, in your paper of the 14th instant, a method described to prevent the bleeding of the grape vine. I will mention one *far more simple*, and I think equally as sure. Cut the stock slanting each way, bringing it nearly to a point; take a potato, size in proportion to the stock, split it, bore a small place, and press it upon the end of the stock, below the part that is cut. In a week, the potato may be removed: it will be as well, however, to let it remain longer.

Yours truly,

ISAAC SOUTHGATE.

Leicester, *April*, 1849.

Editorial Remarks.

Some persons contend that they can apply a potato so as to prevent the bleeding of a grape vine, however powerful the expulsion of the sap may be. But many say that, when the flow of sap is very strong, a potato is of no use, though applied in the best manner. It is evident that the potato cannot resist a great force, and when the sap rises with sufficient power to force its way through pieces of bladder tied over the end of the vine, we should think that the potato would be ineffectual. Yet we have no doubt that our correspondent, and many others, have been successful with this simple application. But they might not have been severe cases. Sheet India rubber, tied tightly over the end of the vine, is sure. We think that some water cement may be prepared that will be as effectual in stopping a *leak* in a grape vine, even from an injury on the side of a vine, as in stopping water in a cask or other vessel.

For the New England Farmer.

FODDER FOR MILCH COWS.

Mr. Editor: I have read with much interest what has recently been published in respect to green corn fodder for milch cows. I now give my experience in regard to it; though it will have but little weight, when opposed by the high authority of the committee of the Essex Agricultural Society. It has been my lot to farm where we have a very poor pasture. We have fed our cows in part upon green fodder, raised for the purpose, from the 10th of May until October. We raise winter rye, oats, barley, millet, and cornstalks. My experience has led me to the belief that one half acre for every eight cows, well manured and planted with corn for fodder, is the best crop that can be raised for feeding milch cows in the month of August, whether the milk be sold or used for the purpose of making butter.

I am aware that there are many good farmers who think, from their own experience, that green cornstalks are not good for milch cows. Why this difference of opinion?

We know that some human stomachs are constituted differently from others, so that that which is food for one is poison to another; but facts do not warrant the same conclusion in regard to the cow. The difference must arise, then, either from the manner of feeding or the quantity given.

Any one that has observed the habits of a herd of cows, while feeding in the pasture, has noticed that they form many regular habits, and if they are not interrupted in these habits, they will be at the same place nearly at the same time each day. If stalks are given to them in the pasture, it breaks up their regular habits of grazing, and they become uneasy.

They should be regularly fed from the barn, not in large quantities at first. As the feed in pasture begins to fail, give them a few stalks at night; then in the morning they will pursue their regular habit of grazing. But if they are fed too freely at first, they cease to graze, and soon lie down until they begin to feel the demand of appetite; then, instead of feeding, they begin to bellow for stalks. Under such circumstances, I think cornstalks will cause cows to dry up. But when given in a proper place and in a proper quantity, I think they increase both the quantity and the quality of the milk.

I intended, when I began, to speak of the comparative value of the different crops for producing milk; but I have already taken up too much space.

WILLIAM R. PUTNAM.

North Danvers, *April* 13.

Editorial Remarks.

Our correspondent has made valuable suggestions, and introduced a subject for consideration which is often neglected. We hope that he will pursue it, as he intended; for we still want more light on the comparative value of different kinds of food for animals, particularly for milch cows. Mr. Putnam will excuse us in omitting his preliminary remarks on *winnowing* communications, as his article appeared to be free from *chaff*. See p. 17.

For the New England Farmer.

THE GADFLY IN CATTLE.

Mr. Editor: I noticed, in the New England Farmer of March 31st, an inquiry respecting the gadfly, in which the writer concludes by saying, "Now what I wish to know is, what is the remedy? Can any thing be applied which will destroy these grubs, and do no injury to the cow?"

I have for years noticed that these insects are a great inconvenience to cattle, making them poor and in a great degree weakening to oxen which are troubled with them; and I have found by experience that carding cattle constantly, once a day, through the winter, will effectually destroy these intruders, and the cattle will do enough better, otherwise, to richly pay for the trouble. After these insects get their growth in the backs of cattle, I know of no remedy better than the one you propose; but years of experience have proved to me that thorough carding on the back will effectually destroy them.

HORACE CARPENTER.

Worcester, Vt., *April*, 1849.

Editorial Remarks.

We are pleased to hear of so simple a remedy, and one which besides destroying the grubs tends greatly to the comfort and good condition of animals. As cattle do not bathe, rubbing, brushing, and currying are very necessary to keep the skin clean, and in a healthy condition; and unless this is attended to by those who have the care of stock, the skin becomes foul, the pores are stopped, the circulation impeded, and as the insensible perspiration through the skin is checked, the matter is thrown inwardly to the

vital parts, and disease follows, or a dull, uncomfortable, languid condition is the consequence, which lessons the value and profit of the animal.

Cattle and horses should be curried daily, while they are kept in the barn or stable; yet many farmers neglect this useful operation, though it is almost as essential to a high state of health as food, water, pure air, or exercise.

THE POWER OF THE MUSCULAR SYSTEM.

The number, variety, and power of the motions capable of being produced by these muscles are indeed most wonderful, as all have seen and experienced. They enable us to climb the lofty tree, and even the smooth pole of liberty; to mount the towering mast, and not only support ourselves in the rigging of the ship, but to put forth great muscular exertion while she is tossing and rolling, and that in the midst of the hurricane. Standing upon our feet, we can toss our bodies, weighing from one hundred to two hundred pounds, several feet upwards and forwards, and in all directions, for many hours in succession, as in dancing and the circus. Or we can transport it fifty or sixty miles between sun and sun, and even carry many pounds weight upon our backs. Or we can chase down the fleetest animal that runs. Or we can labor briskly every day, for scores of years. Or we can lift and carry several times our own weight. Or we can accomplish a multiplicity of powerful and protracted bodily exertions, and do a variety and amount of things almost without end.

IMPORTANCE OF LABOR.

It is a well demonstrated truth, that happiness can be found only in the natural, proper, healthy action of the powers and faculties which the Creator has given, or in obedience to the laws written by the finger of God on our physical, organic, and mental constitution. These powers and faculties were given that they should be exercised prudently and judiciously. Divine Wisdom never designed the human being for a life of total inactivity and ease; and he who seeks for happiness here will most surely be disappointed. No man was ever born into the world with a constitution fitting him naturally for such a life; and he has sought in vain for the highest good, and the perfection of earthly happiness and enjoyment, save when, in accordance with the divine arrangement, he sought for it in vigorous action, in labor, in the exercise and development of every power and faculty of his being.

The importance of labor is too little thought of and regarded — labor with the hands, with every muscle and sinew in this curiously wrought human frame. The idea, too, has crept into some weak craniums that it is disgraceful to labor; that *to work* is to stoop from superior dignity and excellence. But God has not so said in the arrangement he has made. It is an ordination of his, that he who will not work shall not eat well, nor sleep well, nor feel well — that his condition shall be the reverse of that man, who, standing firmly upon the green earth, his hands hanging carelessly by his side, and his eyes wandering over space, is permitted to feel, thus circumstanced, such agreeable sensation arising in his mere bodily frame, that he can raise his mind to heaven, and thank God that he is a living man.

Not only do bodily health, and vigor, and consequent enjoyment, depend upon labor, but also health and vigor of mind, and the pleasurable emotions resulting from this mental condition. It has been well asked, "What distinguished man in this country or age, or any other, but took a great amount of exercise while young?" You can hardly point to a great man, to one eminent in any department of knowledge or letters, whose hands in his early years were not hardened, his frame knit and rendered sinewy, and his brow made dusky by manual toil. No man, perhaps, of the present day, stands higher as a scholar than Elihu Burritt, the learned blacksmith; and the fact, that, while mastering language after language, he was compelled to labor at the anvil and forge eight hours every day, tells the whole story of his intellectual growth, and the way he climbed up to eminence and distinguished honor. Henry Clay was once a poor boy, and knew what it was to work with his own hands for a living. And the immortal Shakspeare, whose fame is world wide, often laid aside his pen, folded the wings of his genius, hushed the voice of his lyre, and went out to labor in carrying brick and mortar. "Webster was a backwoodsman, born in a 'log cabin' on the borders of the unbroken forest," and was no stranger to hardship, exposure, and daily toil. "Franklin, the beacon star of his profession, was a practical printer." Washington, whose "fame is eternity," when not in the service of his country, was engaged in agricultural pursuits; and he received the news of his election as president of the United States while following the plough. And shall it now be said that labor is disgraceful? that to work is undignified, and is not indispensable to health and vigor of body and of mind? No — it is manly to labor, and for six thousand years God has been uttering it in human ears, that he who will not work shall not enjoy. — *Wisconsin Farmer.*

CULTIVATION OF TREES.

Few persons have a correct idea of the rapidity of the growth of well cultivated trees, and many are deterred from planting them, by the consideration, selfish at the best, that they shall not live to reap the fruits of their labors.

Such persons may derive encouragement from the statement of a few facts. In the spring of 1836, I set out, in front of my office, in Chester, two elm-trees. They were then so small that I could easily carry them, with the full top upon my shoulder, and were, perhaps, two inches in diameter. I measured them carefully in the fall of 1847, and found them of equal size, and each measuring forty-five inches in circumference. They stand about eighteen feet apart, and some twelve feet from the building, for which they form a perfect protection from the summer's sun, their branches being already interlaced. The elm is in that neighborhood of more rapid growth than the rock maple, or indeed more than any other forest tree.

An apple orchard may be brought to commence bearing in four years from transplanting from the nursery, which should be the second or third year from the time of budding. By the eighth or tenth year, your orchard, well managed, will pay you annually for all your trouble and expense in planting it, and will continue productive as long as you have any right to expect to live. Peach-trees usually bear the third year from the stone, and the second year from the bud. — *Hill's Monthly Visitor.*

REMARKS BY THE EDITOR NEW ENGLAND FARMER.

Thousands of cases might be named of the rapid growth of fruit and forest trees. In a short time, a tree attains a large size under good management; and no one should be discouraged from planting trees from their slow growth, as this is usually owing

to neglect. There was a time when it was urged as a duty to plant trees for posterity; but so many improvements have been made in hastening the maturity of fruit trees, and the growth is forced so rapidly by high culture, that trees soon attain a large size and become productive, and as a natural consequence, they will be short-lived.

This change is an improvement, and in future every generation must plant for themselves. The peach comes into bearing early, and after producing a few crops, it generally declines; but this is no objection to its cultivation, for it holds out the prospect of an early return for labor expended. We must plant corn, potatoes, peas, beans, &c., every year; and this is no objection to their cultivation; on the contrary, it affords the farmer greater facility for their production, than if they were perennial plants, and required ten or fifteen years to come into bearing.

MANAGEMENT OF STABLES.

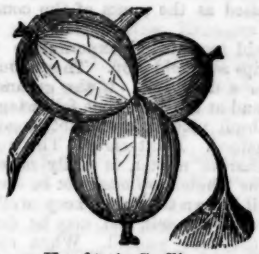
The great desideratum in a stable is ventilation. A horse requires air equally with his master; and the latter requires a chimney to his sleeping apartment; so does the former. The chimney may be a mere outlet, opening through the ceiling, or it may be formed as a dome or cupola. It should not, of course, be open at the top, or rain will get in, but roofed over, and an opening at the sides by weather boards. Besides this, there should be openings in the walls near the ground, but not in the stalls. This will produce a thorough air. It may be so placed as not to expose the horses to draught. The stable should not be less than twelve feet high, from floor to ceiling, and the former should be well paved, slope slightly backwards, and along the back of the stalls should run a gutter about a foot wide, and an inch or two deep. No stables should be less than eighteen feet deep, and each stall should be at least six feet clear; but if eight feet can be afforded, so much the better. Although some horses will agree when kept together in one stall, it is far better to give each a stall to himself. The manger should be about sixteen inches deep, the same from front to back, narrower at bottom than at top, and two feet in length. The rack is best closed in front, the back part being an inclined plane of wood, sloping gradually towards the front, and terminating about two feet down. This rack effects a considerable saving in hay; for we need scarcely remind our readers that, in the common rack, much of the hay given is trampled in the litter. It also prevents the hay seed from falling into the horse's eyes, for the rack, such as we recommended, is on a level with the manger, and about three feet from the ground. Another advantage also gained by this rack is the facility with which it can be filled, thus obviating all necessity for a loft over the stable, and, consequently, admitting of a greater height of ceiling, as well as superior ventilation. The windows and doors should be at the opposite ends; this promotes ventilation; the former at the south-east extremity of the building; the latter should be divided transversely, like an ordinary barn door, at the height of about four feet from the ground. The door portion may thus be occasionally open. Whitewash is a bad dressing for the interior of a stable, as it causes too great glare of light; paint of a leaden color is best; it can be washed from time to time with soap and water. There should be a bin, divided properly into partitions, for oats, beans, &c., and this is better at the back of the stable, and may be made to answer the purpose, both as regards utility and ornament, of a seat. A few buckets of water dashed over the floor of the stables while the horses are at work, or, if hunters, at exercise, will keep all sweet. The litter should also be turned out to dry, or a bit of fresh straw spread for the horses to stand on. A shed placed beside the stable is a great advantage, on two accounts; it admits of the litter being dressed and the horse dressed there in wet or stormy weather. A little powdered gypsum strewn upon the stable floor, will also act by absorbing the ammoniacal gas — a frequent predisposing cause of ophthalmia. Should the ammonia, however, have accumulated in any quantity, the speediest and most efficacious remedy, as a disinfectant, is the laying down a plate, or dish, containing muriatic acid. — *Maine Farmer.*

CHEMICAL COMBINATION.

Another striking example of this chemical creation is the protoxide of nitrogen, — called from its effects the *intoxicating gas*, — a simple combination, in slightly altered proportions, of the oxygen and nitrogen composing the air we breathe, but nowhere existing in nature under the form in which science presents it to us. The admission, now generally made, that atmospheric air is a simple intermixture of gases, and not a chemical compound, scarcely abates the wonder that so small a change in the proportion which ministers to common life should become the cause of those sudden and singular affections of the brain and nervous system, which alter for a time the whole condition of the being. Chemistry, however, and especially organic chemistry, accustoms us to these wonders. More strange and striking still, in their properties recently discovered, are the two creations of the laboratory — sulphuric ether and chloroform. By working with and among the relative affinities of certain elements, man has obtained these compounds, — and there may be others of kindred quality, — the simple inhalation of which produces a state of insensibility to pain, even under operations the most severe which surgery can inflict. We have spoken much of chemical analysis. This is in effect an analysis of the compound nature of man; the separation and the removal for a time of a part of our sensitive existence — having close analogy indeed to certain of the conditions of sleep, (itself the great miracle and mystery of life,) but even more striking in some of the inferences it conveys; and unless it be that bodily suffering is allotted to us for moral uses — a discovery profuse of future benefit to the human race. — *Quarterly Review.*

QUERIES FOR SCIENTIFIC MEN.

In what manner does diamond act upon glass so as to cut it? That it does not penetrate its substance is obvious to any one who attends to its operations, for it only divides the exceedingly attenuated pellicle on the surface, and penetrates no deeper. The best cut of a diamond is when it makes the least noise in passing the line, and it cuts in the same manner the thickest as well as the thinnest plates of glass. The Encyclopædia Americana says, that "it is very remarkable that only the point of a natural crystal can be used; cut or split diamonds scratch, but the glass will not break along the scratch, as it does when a natural crystal is used." Again, "the crack is often found to follow the diamond after it has passed several inches. That it does not cut it by dividing the pellicles is clear, because a piece of quartz will do the same by passing in the same line repeatedly, yet it will not break true. Then how does the diamond act? Is it by electricity or galvanism, or the carbon acting upon the compound of which glass is composed?"



Houghton's Seedling.

Crown Bob.

THE GOOSEBERRY.

For the New England Farmer.

Mr. Editor: The gooseberry requires a deep, rich soil, and the same general culture as the currant. It is naturally fond of a moist soil, and is raised in the humid atmosphere of England in its greatest perfection. In our hot and dry climate, it is naturally found in wet swamps, or in moist, rocky woodlands.

As the English or Scotch gooseberry has never succeeded well with us, in consequence of its liability to mildew, — a disease incident to our hot and dry climate, — we were induced, a few years since, to attempt to produce some seedlings from a cross between a Lancashire and our native kinds. We have succeeded in producing several varieties, possessing some excellence.

But the best gooseberry we have seen thus produced, and far exceeding any thing of our own production, is the one raised by Mr. Abel Houghton, formerly of Lynn, Mass. Some years since, we received from Mr. Houghton this gooseberry, and it has proved to be a very fine variety, and I think it combines more good qualities than any kind I have ever seen. My friend, Mr. Ives, of Salem, who also has this gooseberry under culture, speaks of it as being worthy of general cultivation, and that it possesses the habits of the "Crown Bob" in throwing out long pendent shoots. These long branches are something peculiar to this variety, and, when suffered to grow and trail upon the ground, readily take root, and thus new plants are rapidly produced. When these are kept from the ground, by tying them to stakes, they can be trained to a considerable distance.

In my mind, there is but little doubt that this fine gooseberry is a hybrid, produced by a cross between a wild gooseberry and the "Crown Bob." It is very hardy, most easily propagated, bears regularly, and most profusely, the berries thickly set on the branches, and crowding each other to their very ends. It also commences bearing at a very early period of its growth. The berries, when properly cultivated, are generally of a good size, the skin very thin and tender, of a dull, pale white, tinged with a reddish brown. The flesh is easily broken, and sweet and pleasant to the taste.

Although we have cultivated it for several years, we have never known it to blight. To produce fine fruit of a good size, the shrub should be highly cultivated, and all the old wood cut out. It also should be set where it will not receive the intense heat of the noonday sun, as, when thus exposed, the fruit is liable to be injured, and fall before it is ripe. The fruit is ripe the last of July, but it can be retarded in its ripening by setting the plants on the north side of a wall or fence. We are in the habit of strewing ashes around the bushes, and covering the ground with spent tan. This serves to keep it moist and light. From all that we have seen of the Houghton gooseberry, after several years' cultivation, we would, with great confidence, recommend it for general cultivation. S. P. FOWLER.

Danvers New Mills, *April* 13, 1849.

Editorial Remarks.

The opinion of Mr. Fowler on the Houghton gooseberry is in accordance with our own experience and observation. In the first year that we set some little twigs of this variety, they grew vigorously, and the next season they were covered with fruit to their tips. While most kinds of gooseberries are of coarse texture, and of a harsh, acid quality, suitable for cooking only, this is tender, sweet and luscious, forming a valuable dessert fruit, particularly for children, and many others, who prefer a saccharine property.

REPORTS OF THE AGRICULTURAL MEETINGS.

At the meeting, April 10, the subject of agricultural education was postponed, on account of the small number in attendance. The committee, to whom the subject of publishing reports of the meetings in a permanent form was referred, substituted the following preamble and resolves, which were passed: —

It being the purpose of the Legislative Farmers' Meetings to acquire and diffuse a knowledge of the most productive and economical methods of farming and gardening, through the contributions of farmers and men of science, and also to preserve the same in a durable form, by suitable reports of their proceedings, —

It is therefore resolved that hereafter, at these meetings, measures be taken to have accurate reports of their proceedings published in the volume of "Transactions of the Agricultural Societies" of Massachusetts, annually prepared by the secretary of state, and published by order of the commonwealth.

It is further resolved, that the foregoing duty, in its details, be devolved upon the standing committee appointed at the commencement of each of these annual meetings.

HORN-AIL IN CATTLE.

Mr. Editor: I lately noticed a very sensible piece in your paper, taken from the Lowell Journal, on the symptoms and treatment of this disease in cattle. I perfectly agree with that writer in regard to the symptoms and the propriety of a good, warm, dry bed, and food of easy digestion, and also nutritious, such as potatoes, oatmeal, &c.; but in regard to physic, or any purging medicine, I have for twenty-five years past made use of the shrub, or bush ivy, or what some call *mercury*, which grows in low mowing land. — *Mode of Preparation.* Take as much of the herb as will nearly fill a six or eight quart kettle; boil it, say two hours, and have about two quarts of liquor when boiled, and give a common junk-bottle full at a dose, moderately warm, and repeat the dose in twenty-four hours, and again the next day if thought necessary. By this treatment I have never found any difficulty in restoring the animal to a good appetite and good health in a few days; but the sooner a sick animal is attended to, the more easy and speedy the cure.

N. B. Care should be taken in boiling the ivy, and have no persons exposed to the steam arising from it, for fear of poisoning them, if they are easily poisoned by the green plant when growing in summer.

Farmers should always lay up a bushel of ivy in hay time, when it can easily be saved, and have it ready if they should be so unlucky as to need it in the winter or spring, which is the most usual time for the disease to prevail.

I have also found a sirup made of the ivy a very effectual preventive against poisoning, when working amongst it in haying time, or any other time of the season. The sirup is to be made as follows: Take one pound of ivy, boil it thoroughly, and have, when boiled, two quarts of the liquor; add two quarts molasses and two quarts good brandy; shake it well together; and before going to work where you are exposed to the ivy, take about one table spoonful, and repeat the same dose forenoon and afternoon, while exposed to it; and persons so doing will find but little inconvenience arising from the effects of the poisonous quality of the ivy.

I have made use of the above sirup for myself and boys, and hired hands, who formerly poisoned very easily, for several years, with complete success, and consider it a perfectly safe remedy.

DAVID NOYES.

Norway, *March* 19, 1849.
— *Norway Advertiser.*

Remarks by the Editor New England Farmer.

It is an astonishing fact that poison ivy, (*Rus radicans,*) the very effluvia of which will poison some persons severely, when passing near, without coming in contact with it, may be taken internally, not only with safety, but as a valuable medicine; also as an excellent remedy against the effects of its own poison; and Mr. Noyes shows that it may likewise be used as a preventive.

CULTURE OF PARSNIPS.

We hope that the farmers of Maine will pay more attention to root crops the ensuing season than they have for a few years past. Many more roots of all kinds were raised, in this section of the Union, ten years ago, than there are now. Subsequently to that period, potatoes commanding a ready sale and good price for starch factories in the interior, and for shipping or the seaboard, our farmers put their whole strength to this crop, omitting, in a great degree, the other roots. Soon after this, the rot commenced, and farmers, as if discouraged, left off planting, not only potatoes in so large quantities as before, but also other roots; and now there are not so many raised as the wants of the community demand.

We would recommend experiments to be tried with parsnips as a field crop. They should be planted early, in a deep soil. If the ground should be ploughed, and at the same time following the plough with a subsoil plough, no doubt great advantage would be gained. Plant early. This root contains much saccharine matter, is easily raised and preserved. The whole crop need not be dug in the fall, for it is well known that they keep well all winter, frozen down in the soil, and may be drawn in the spring as they are wanted. When cooked, they make excellent food for swine, and they also make an excellent provender for milch cows in the spring, at a period when something of the sort is needed to give richness and substance to the milk. The principal objection we ever heard made to the culture, is the difficulty of harvesting them, or getting them out of the ground.

We are told by some who have travelled in the Islands of Guernsey and Jersey that much account is there made of the parsnip crop for the purpose of feeding their cows, and that the increase of cream and the excellent flavor imparted to it by this food, makes it peculiarly profitable to them. — *Maine Farmer.*

THE POTATO DISEASE.

Although this may seem not to be a fit time or season of the year, I venture to say or make a few remarks on the subject of the potato rot. Aware that there has been a great deal said relative to it, and various remedies prescribed, still I do not think but what some remarks may be made advantageously on the subject yet. The potato has been too highly cultivated, and has become exhausted through excess of cultivation. Though to some this may seem like strange logic, yet, in my humble opinion, it is nevertheless true; and I was confirmed in the opinion the last season by observation and experiment. In one case, in particular, I noticed, while digging the potato, that in one part of the field, where the soil was greatly superior to that of any other part of it, and where the potato has been better and oftener dressed than in the other part, that they nearly all were rotten; while in the other part of the field, where the soil was of an inferior quality, and the potato not half attended to, there none were diseased. This, and numerous other cases, make it very evident to an observer, that the root has become sickly and exhausted through excessive cultivation. I conclude, therefore, that the following remarks may be worthy of notice in the premises. The ground selected for the potato should be high and dry; a piece that the water will not stand on after a shower; with rather a light soil. Or, if your land is low and clayey, let it be ridged up by turning two furrows towards each other, and plant on those ridges, with your hill in such a manner that the water will rather run from than towards it. After your ground is thus prepared, plant as soon as possible, and as early in the season as practicable, without any regard to the "moon," or any other signs. Keep the ground as free as possible from weeds, without disturbing the earth close to the hill of the potato. As soon as you perceive the vines begin to dry up or die, dig the potatoes immediately, and before putting them in the cellar, let them get thoroughly dried, and they should be kept so in the bin or receptacle. If those whose potato crops have been destroyed will

try this mode of culture, they will give it a preference as a preventive over "clipping," or any other method yet recommended. J. A. S.

GRATTAN, KENT Co., MICH., 1849.

— *Dollar Newspaper.*

REMARKS BY THE EDITOR NEW ENGLAND FARMER.

The article above contains valuable hints on the cultivation of the potato; yet we think that the cause assigned for the rot in potatoes is a predisposing cause only, not the principal cause. Previous to the late malady, some farmers had given to certain varieties high culture for thirty years, and so from failing in any way, they improved under judicious management and high culture.

By high culture, good potatoes were raised on a certain piece of land for twenty years in succession. We noticed the twentieth crop, and it was fine. This could be done only by high culture; for without very liberal manuring, the potato soon fails in succession. Yet on that land there was no rot, until the disease became general.

There are thousands of farms on which the same varieties of the potato have been cultivated for many years, and seldom with high culture; yet it rots on such farms, and occasionally on the best soil, and under the most favorable circumstances for guarding against it.

RAISING ONIONS.

FRIEND HOLMES: I have noticed considerable in your paper relative to raising onions — remedies for the onion worm, or maggot, &c., &c. I will give you my experience, for the benefit of the public.

I have discovered that the egg of the maggot is deposited in the skin of the seed, and consequently sown with the seed, as the weevil in wheat. By soaking onion seed in warm water, a little warmer than blood warm, half an hour will hatch out lots of live maggots. Then you may soak the seed in copperas water, or saltpetre, to kill what maggots do not hatch out in the warm water. Dust them with dry, slaked lime, and sow in good onion ground.

We should like to have this experiment tried, and see the results published in the Farmer next fall.

RAYMOND, *March* 26, 1849. J. M. T.

— *Maine Farmer.*

WHAT CONSTITUTES GOOD FARMING.

In his work on "Laneash Farming," a rare and valuable contribution to agricultural literature, Mr. Rawstone, the author, remarks: —

"It may be laid down as a standing rule, and as a guide to direct us, that all good farming, the whole of that process by which bad land is to be converted into good and productive, and continued in that state, is composed in the three following operations of husbandry, viz.: —

"1. To carry off all superfluous and stagnant water, by means of judicious draining.

"2. To return, through the medium, of manure, the strength and fertility which has been exhausted by cropping.

"3. To extract all noxious weeds, that the strength of the manure may be thrown into the crops, and not into the weeds."

Every cultivator, who exercises discretion in the management of his lands, will recognize at once the importance of observing these rules. Every weed produced on a farm abstracts somewhat from its productive value, and, when permitted to mature its seed, is a nuisance, the deteriorating and stultifying effects of which will make themselves felt for many years. To manure a field which has been carelessly hoed for one or two seasons, and where more spurious vegetation has been allowed to reach maturity, than has been destroyed, or even crippled, by the hoe, is a labor that can involve little else except disappointment and dissatisfaction in the end. Hoeing and weeding are processes which should be performed with skill and circumspection. Every weed should be eradicated and destroyed. When one hoeing, or one weeding, fails to effect this, let it be repeated; and so on till the soil is thoroughly cleansed, and every vestige of spurious vegetation utterly and completely destroyed. Most weeds are gross feeders, and abstract a greater amount of nutritive matter from the soil, than is required to perfect three times the number of cultivated plants, of equal or even superior size and weight.

A MONTGOMERY COUNTY FARMER.

March 16, 1849.

— *Germantown Telegraph.*

FATTENING FOOD.

The experience of farmers has always been in favor of the doctrine that oily provender is required to produce fat; beech-nuts, linseed-oil cakes, and corn enjoy the highest reputation, and are most charged with oil. Liebig has, however, advanced the doctrine that farinaceous vegetables, as the potato, carrot, &c., are fattening from the starch they contain; but although this may be true physiologically, yet, in ordinary farm management, it is found cheaper and more expeditious to use fodders already containing the fat, rather than to wait for the slower transformation out of starch.

Fattening food should be well prepared by grinding and steaming for hogs. A mush that had become slightly sour was found to fatten more expeditiously, by Arthur Young, than the fresh food.

The following table gives the comparative values of provenders for fattening, by showing the amount of oil they contain: —

Indian corn, ...	9	to	10	per	cent.	of	oil.
Oats, ...	4	"	5	"	"	"	"
Wheat, ...	2½	"	2½	"	"	"	"
Bran, ...	4	"	5	"	"	"	"
Oil cake, ...	9	"	10	"	"	"	"
Clover hay, ...	4	"		"	"	"	"
Meadow hay, ...	3½	"	4	"	"	"	"
Peas and beans, ...	2½	"	3	"	"	"	"
Beech mast, ...	15	"	17	"	"	"	"
Sunflower seed, ...	15			"	"	"	"
Linseed, ...	11	"	22	"	"	"	"
Hempseed, ...	18	"	25	"	"	"	"
Straw, ...	1	"	1½	"	"	"	"

These numbers are not constant, for the amount of oil depends upon the season, increasing with the brilliancy and dryness of the weather. Potatoes, beets, carrots, turnips, mangel wurzel, contain less than one quarter per cent., and are therefore not adapted for fattening alone.

The same values are true for butter and milk, except that oil cake imparts a bad flavor. Poultry and pigs are now sometimes fattened in part on animal fat, as cracklings, greaves, &c. One of the most successful bodies in the list is ground linseed meal; but, considering its other qualities, corn is the most esteemed. If the cake or oily seeds are used, it will be necessary to mix meal, oats, or peas with them, to preserve the health of the animal; five pounds of cake are a sufficient supply for the day.

Domestic Department.

For the New England Farmer.

Domestic Happiness. — The pursuit of happiness is laudable, and is more easily secured than some would suppose after realizing the uncertainty of its acquisition by the often tried means of unlawful schemes for its attainment. Within the family circle there is ample room for the full display and expansive influence of the heaven-born virtue — domestic happiness. Each and every member thereof has his or her respective duties and obligations to perform, in order to render home just what it should be — the seat of quietude and enjoyment, the reservoir of the choicest blessings of earth.

"Domestic happiness, thou only bliss
Of Paradise, that has survived the fall!
Though few now taste thee unimpaired and pure,
Or, tasting, long enjoy thee! too infirm,
Or too incautious, to preserve thy sweets
Unmixed with drops of bitter, which neglect
Or temper sheds into thy crystal cup;
Thou art the nurse of Virtue; in thine arms
She smiles, appearing, as in truth she is,
Heaven-born, and destined to the skies again.
Thou art not known where pleasure is adored.
That reeling goddess with the zoneless waist
And wandering eyes, still leaning on the arm
Of Novelty, her fickle, frail support;
For thou art meek and constant, hating change,
And finding in the calm of truth-tried love
Joys that her stormy raptures never yield.
Forsaking thee, what shipwreck have we made
Of honor, dignity, and fair renown!"

Thus the man of true poetical genius left his testimony to the priceless value of social, domestic happiness.

Let not this blessed "survivor of the fall" be cast off and displaced, which, if done, will be succeeded by a plant of a rank and bitter nature.

Domestic happiness! in thy very name are charms which invest thy votaries in the pleasing mantle of quietness, assurance, and peace. J.

Vinegar. — Many families purchase their vinegar at a very considerable annual expense: some "make do" with a very indifferent article; and others, for want of a little knowledge and less industry, go without. It is an easy matter, however, to be at all times supplied with good vinegar, and that too without much expense. The juice of one bushel of sugar beets, worth twenty-five cents, and which any farmer can raise without cost, will make from five to six gallons of vinegar, equal to the best made of cider or wine. Grate the beets, having first washed them, and express the juice in a cheese press, or in many other ways which a little ingenuity can suggest, and put the liquor into an empty barrel; cover the bung with gauze, and set it in the sun, and in twelve or fifteen days it will be fit for use. — *Farmer's Advocate.*

To take Ink out of Linen. — Editors' and clerks' wives will learn with pleasure that to take a piece of tallow, melt it, and dip the spotted part of the linen into the melted tallow, the linen may be washed, and the spots will disappear, without injuring the linen.

Fifty years ago, Mrs. Washington knit stockings for the general: now, there are not fifty ladies in a city who can play that part, and hundreds know not how the apple gets into the heart of the dumpling.

Boys' Department.

Early Rising and Industry of Birds. — The zeal and perseverance with which some persons devote themselves to the economy of nature, to the developments of science, the observation of animal life especially, either in its structural forms or its habits, prove that there is something perfectly unselfish in human nature; a love of truth for its own sake, absolutely disinterested. The whole history of science manifests this. Bacon, it is true, defiled his mind with the love of lucre, and sullied his great name by acts unworthy of an honest man; but generally the true devotee of science is one who postpones all other gratifications to the end he has in view — simply to explore Nature, and to demonstrate her laws.

One of my friends in Paris has an acquaintance remarkable for the simplicity of his manners and the kindliness of his disposition, who, like Alexander Wilson and Audubon, delights himself in the history and the habits of the feathered race. M. Dureau de la Malle is not adventurous, like our American ornithologists. Linnæus sometimes employed himself with satisfaction upon a few square feet of grass ground, to study the varieties of its vegetable products, and the multitude of insects that find their sustenance upon them; and St. Pierre, in the vitality of a single strawberry plant, beheld with admiration the wisdom and goodness which bestow consciousness and enjoyment in minute and innumerable forms of life. M. de la Malle, in like manner, watches over the affections, the industry, the pleasures, and distinctive peculiarities of the pretty creatures who have made their resting-place under his windows. To do this, for half the year he accommodates his own habits to theirs. "For the last thirty years," says he, "in the spring and autumn, I go to bed regularly at seven o'clock, and rise at twelve — a practice necessary to make observations upon the matinal habits of birds." Eight species have afforded the following results: The chaffinch (*pinson Francais*) awakes from one to half after one in the morning; the linnet (*fauvette*) between two and a half and three; the blackbird (*merle*) between three and a half and four; the nightingale (*rossingol des murailles*) between three and three and a half; the lapwing (*pouliot*) at four; the sparrow (*mojneau*) at from five to five and a half; the tomtit (*mesange*) also from five to five and a half. Thus the chaffinch is the most matinal and the sparrow and tomtit the most dilatory of the birds observed.

Endeavoring to ascertain the causes of these differences in the commencement of their diurnal activity, M. de la Malle noticed some curious facts in regard to several individuals. June 4, 1846, the linnet and the blackbird, which had not previously taken flight until four o'clock, changed the time to two and a half. What was the occasion of this? Their little ones were hatched; the necessities of each family had increased. Until this day, the provident male obtained food for himself, and had relieved the patient hen, both enjoying a protracted repose, compared with other tribes; but the increase of a bird's nest, like that of a human family, demands increase of means, and, therefore, increase of toil to supply their wants. By the clear light of the moon, the fathers and mothers of the two species were then, and afterwards, seen busy, searching among the grass and along the flower borders for insects, and stray particles of nutritious substance, destined to feed the nestlings.

June 11, the linnet was awakened some hours before the usual time by the light of a brilliant lamp, and began to sing; but perceiving that she was out of season, she composed herself again. Free blackbirds, full grown, were never observed to imitate any

note of other birds, while caged birds of that species, taken young, become very good imitators. M. de la Malle possesses one of the latter, which he caused to be hung up near the garden. There its powerful voice sent out vigorously the acquired song.

The free birds, however, disdaining this accomplishment, resisted all improvement, and limited themselves to nature's teachings. Not so their fledglings; they, impressible like him who has dominion over the birds of the air, and, like generations of men seizing upon new suggestions, in despite of the tenacity of their predecessors, learned the song of the little captive. Hatched March 10, these young blackbirds were the offspring of the same pair, their birthplace was the same garden, the same linden-tree, the same nest, and, by the middle of June, they had become proficient in the art of the caged bird, answering to him, or singing in concert with him, repeating with many voices the notes which had been sung in vain to their parents. So much for good company and the education of birds.

According to M. de la Malle's observations, *domestic birds* — for they may be called such, that fix themselves confidingly near the habitations of man — require just the same duration of sleep as the lord of creation. Seven hours, a little more or less, out of the twenty-four, are necessary to the daily refreshment of our human life, and so long appears to be the period allotted to the oblivion of those little lives which minister so delightfully to the gratification of ours. — *Littell's Living Age.*

Health.

Water as a Beverage. — Water is the natural and proper drink of man. Indeed, it is the grand beverage of organized nature. It enters largely into the composition of the blood and juices of animals and plants; forms an important ingredient in their organized structures, and bears a fixed and unalterable relation to their whole vital economy. It was the only beverage of the human family in their primeval state.

In that garden where grew "every tree pleasant to the sight and good for food," producing all the richness and variety of "fruit and flower" which an omnipotent and all-bountiful Creator could adapt to the relish of his senses, and the exigencies of his entire organization, it cannot for a moment be doubted that man was in a condition the best suited to secure to him the uninterrupted, as well as the highest and best exercise and enjoyment, of his physical, mental, and moral powers. His drink was water. A river flowed from Paradise. From the moment that river began to "water the garden," till the present, no human invention has equalled this simple beverage; and all the attempts to improve it by the admixture of other substances, whether alcoholic, narcotic, or aromatic, have not only failed, but have served to deteriorate or poison it, and render it less healthful and safe.

Water is as well adapted to man's natural appetite as to the physical wants of his organs. A natural thirst, and the pleasures derived from its gratification, were given us to secure to the vital machinery the supply of liquid necessary to its healthy movements. When this natural thirst occurs, no drink tastes so good, and in truth none is so good, as water; none possesses adaptations so exact to the vital necessities of the organs. So long as a fresh supply of liquid is not needed, so long as there is not the least relish for water, it offers no temptation, while its addition to the circulating fluids would be useless or hurtful. — *Dr. Muzzey's Prize Essay.*

Exposure to the Air. — The importance of attending to the habitual exposure of children to the air is not duly estimated. At no period of life does any cause produce such permanent ill effects, as in the feeble and susceptible age of children. The bad effects of want of pure air and exercise are seen in children confined to manufactories, and in those inhabiting a dense and badly-ventilated part of a large city. Contrast these with children of the country, and we shall see a wonderful difference.

Mechanics' Department, Arts, &c.

As the days are becoming longer, mechanics will find time to have a little respite from their usual labors, and take a pleasant exercise in ornamenting and cultivating a spot of land. This will greatly conduce to their health, and enable them to render their home more endearing to their families, and give to their premises an additional value, both in their own opinion and in the opinion of others.

There are many vegetables, as well as fruits, that are far more valuable when gathered as they are wanted for family use, than those that have wilted and perhaps become bruised and injured by rough usage and transportation. A little time, which may be spent as a rational recreation and healthful exercise, will enable one to furnish his table with many choice dishes, that will be the sweeter as they are the products of his own hands; and in this way there will be the advantage of imparting useful information to children, in the art of cultivation, and in the science of botany, and by example give valuable instruction in economy and industry. By planting the land and attending to its cultivation, important moral principles will be planted in the tender minds of juvenile spectators, or perhaps participators in the pleasant labors, and the cultivation of the earth by the father may serve the valuable purpose of cultivating and improving the mind of the child. Many instructive lessons may be drawn from the pleasing art of horticulture.

The Philosophy of Labor. — How to make industry attractive, is one of our present social problems. Work is a human necessity, and exercise is necessary to health. Idleness is felt as a curse. Every body wishes to be actively engaged at something; but it is nevertheless true that protracted and solitary labor is wearisome, whether it tasks our muscular powers or not. We do not love toil and drudgery, and we are very apt to think that some other occupation would suit us better than the one in which we are engaged.

But there are certain conditions that render all kinds of labor delightful. When a man has a passion for any particular work, he pursues it with ardor and pleasure. The author writes hour after hour with a sustaining enthusiasm, the artist works hard and long at his picture or statue, the gardener who loves his employment never gets tired.

But it is to be observed, that all these labors have another pleasing element — that of variety. The author is constantly producing something new; the artist is engaged in various portions of his work, and bringing them to perfection; the gardener has a little world of objects under his care, and he sees their progress from day to day.

Besides enthusiasm and variety, there is another condition of pleasant or attractive labor; and that is, society. Work is always pleasant and easy where many persons can join together; especially where men and women can engage in it. Rural life gives us many illustrations of this principle.

For instance, there is not much harder work than to sit down alone and husk corn, hour after hour; yet what is more pleasant than a husking? Rolling logs and lifting timber are hard work; but a log-rolling or raising is a festival. What a monotonous and tiresome task it is to pare apples and prepare them for drying! yet what rustic scene is better than a paring bee?

We may draw illustrations from our pleasures and amusements. If a man were to go into a room alone and dance all by himself four or five hours, he would be very much fatigued, and would demand good wages; but give the same man a little music and some agreeable company, and he will not only dance six hours without thinking of fatigue, but is very willing to pay a good day's wages for the privilege.

There are not many kinds of work harder than rowing a boat; but give a man genial companions, fine scenery, and a pleasant excursion, and he will never think of fatigue. Dragging a fire-engine through the streets, working the machine, and fighting a fire, call forth great muscular exertion; yet how nobly is it performed, without wages, by men who are incited by enthusiasm, cheered by association, and enticed by variety!

There is no kind of exertion that is not tiresome by monotony and solitude; there is none that cannot be made delightful by variety and social enjoyment; and if we add to these the spirit of rivalry, or honorable competition, we find enthusiasm and pleasure.

What kind of labor tasks the powers of exertion more than a game of cricket? yet cricket is play, because it combines association and competition. Reaping and mowing matches have a similar excitement.

In Europe, the harvest-time and the vintage are seasons of joy and festivity, though they involve the hardest labor of the year. The vintage especially is a great festival. Men, women, and children work from morning till night, day after day, gathering the grapes and carrying them to the wine-press. Ladies and gentlemen, from the cities, come to witness and join in the labor. The laborers sing together in chorus, and one group answers to another. At the wine-press is stationed a little band of music, for there the work is hardest; but the strongest young fellows leap into the press with their naked feet, and dance the red wine out of the bursting grapes. The labor would be terribly fatiguing without these auxiliaries; but with them it is mere sport.

Children are never tired of their games, although they involve great exertion. But oblige a boy to play alone, or to continue a game ten hours a day, and he would be tired enough.

Now, what is wanting to make industry attractive? Give variety, society, and rivalry, and all work is but play. Is not this the solution of the problem? — *N. Y. Disp.*

THE ONION.

Mr. Editor: There are three varieties of this vegetable cultivated in this region. The *allium cepa* is a biennial, and is highly esteemed as a salad. To insure a good crop, the seed should be sown early in the spring. The soil selected should be of a light, loamy texture, approximating to sand, and so prepared as to enable it to retain a considerable degree of heat without becoming dry or excessively parched during drought. There are, however, few vegetables which require less moisture, or to the full and perfect development of which the principle of heat is more strictly necessary or indispensable. About midsummer, the onion pauses in its growth. At this stage, it should be taken up and stored; for if it is permitted to remain longer in the soil, its value for culinary purposes will be deteriorated, if not destroyed.

The *allium cepa* is one of the few cultivated vegetables which admit of being changed from biennials to triennials. This is effected simply by sowing the seeds quite late in the season, and in close proximity, the first summer, on poor or sterile soil, and transplanting them in the spring of the second season. Onions managed in this way are sometimes called "*scallions.*" They are much more mild and agreeable to the palate, beside presenting a much more symmetrical and perfect development in the bulb. When treated in this way, they will not run to seed till the fall of the third year. The best manure for onions, with which I am acquainted, is gypsum, soot, ashes, and charcoal. Stimulated by frequent applications of these, the onion will succeed well on the same soil for many consecutive years. It is asserted, indeed, and on credible authority, that a piece of soil was shown, some years since, in Scotland, which had been cultivated in this plant for a period of eighty years; and the last crop taken was, it is said, as good, to all appearance, as any of the preceding ones of which the then proprietor had any recollection.

The Potato Onion, (*allium aggregatum.*) — This is another species of the onion tribe. It is wonderfully prolific. It does not, however, like the *allium cepa*, produce one large, distinct bulb, but radiates into numerous offsets, each of which is nearly the size of a small orange. This vegetable is perhaps as extensively admired as the common onion, but is preserved with much greater difficulty. The rule commonly observed in cultivating it, by those who have had the most experience in the business, is, we believe, to plant the smallest "*cloves*" on the shortest day, and to take in the crop on the longest.

The Tree Onion, (*allium Canadensis.*) — This is a "tall growing plant," and should be provided with a support in order to prevent injury from winds. Small bulbs are produced both at the top and bottom of the stems. The latter are said to be preferable to the former in many respects, especially for pickling. The small bulbs may be set either in the fall or spring, and the crop, with proper care and attention in cultivating it, will be ready for harvesting by midsummer.

In cultivating the common onion, I do not consider it necessary to plough or dig the soil. With a common iron-tooth rake, I lightly stir the surface to the depth of two inches, and, having formed the lines with a common seed rake, sow the seed, and cover it with the hoe or hand. The roller is then applied to level and compress the surface soil, and a dressing of gypsum, soot and house ashes, (equal parts,) applied at night, or just before a rain. As soon as the plants make their appearance, another application of the same mixture is given; a third follows after weeding. The seed should be soaked from twenty-four to thirty-six hours before sowing in house ley, or water in which there is some principle capable of softening the pericarp which is remarkably indurated, especially when the seed is old.

A NEW ENGLANDER.

— *Germantown Telegraph.*

While the earth remaineth, seed time and harvest shall not cease.

AGRICULTURAL SCHOOLS.

We make the following extracts from the report of the committee on agriculture in the New York Assembly, to whom was referred so much of the governor's message as related to agriculture, and the memorial of the New York State Agricultural Society for the establishment of an agricultural school.

The importance of the farming interest in our state is manifest; it lies at the foundation of all our prosperity as a people. We are, and of necessity must be, an agricultural people; and it becomes us to inquire in what manner this great interest can best be sustained and advanced. It is a matter of congratulation that, through the efforts of the State Agricultural Society and the county societies, a very apparent advance has been made, and the interest in these associations is increasing yearly. The Transactions of the State Society, which are annually published, are exciting a wide-spread influence, not among our farmers only, but among all classes of our citizens. The two last volumes published have received the approbation of the entire community, and the demand which is made for them shows how efficient they are becoming as aids to the great agricultural interest of the state. In the opinion of the committee, no appropriation of the legislature is exciting such an extended influence for good.

While all these facilities are being appreciated by the farmer, an increasing interest has been manifested for several years on the subject of agricultural education. Not a session of the legislature has passed for several years without having their attention directed to this subject; and so strong has that feeling become, that, his excellency the governor, in his message, in obedience, as we believe, to the will of the people, thus directs our attention to this all important interest: "The history of this state evinces that its legislature have not been content to confine the exercise of its powers to the mere enactment of laws for the administration of the ordinary functions of government, or for the suppression of crime; its canals and other public works, its schools and institutions of learning, are proud evidences of a determination to promote the interest of its commerce and trade, and the moral improvement and happiness of the people, by acts of munificent but judicious legislation. We have long recognized it as a high and holy duty of civilized government to provide for the general dissemination of learning, to foster the enterprise of its people, to develop the resources of the state, to encourage its industry, and to secure to that industry its surest and most ample rewards. Much has been done to effect these ends. A noble fund has been provided, and our common schools and academies are sowing broadcast the seeds of learning. The higher branches of science and the arts have not been neglected. The endowments of colleges and universities have generally been liberal, and the rich return of these institutions, in the advancement of good scholarship, of profound learning, and of liberal and lofty science, is the surest evidence of the wisdom of the past liberality of the state, and the strongest incentive to its future continuance. I think the time has arrived when the state is called upon to make provision for the advancement of agricultural science, and of knowledge in the mechanic arts. Of late years, the science of agriculture has received much attention, and its influence, in combination with the practical labor of those engaged in the ennobling pursuits of husbandry, has lessened the toil and increased the returns of the tillers of the soil. Similar influences have produced similar results with respect to the mechanic arts. If the wealth, and power, and independence of a nation are to be estimated by its ability to supply from within itself its most essential wants, and from its abundance to minister to the wants of others, it is both wise and patriotic for the state to aid the advancement of those particular branches of knowledge more immediately bearing upon the pursuits of the great producing classes.

"In this view I cannot too strongly recommend the endowment by the state of an agricultural school, and a school for instruction in the mechanic arts. I would suggest an annual appropriation, to be expended under the direction of the Regents of the University, for instruction in the several branches of learning connected with agriculture and the mechanic arts. The appropriation should be sufficient to secure the best talents to test the utility of the plan, and if deemed expedient, its duration may in the first instance be limited."

The State Society, at their annual meeting, represented by delegates and others from all parts of the state, unanimously united in the recommendation of the governor, and we have not as yet heard the first intimation that it is not in accordance with the wishes of the people.

That science is destined to contribute largely to the advancement of the agricultural interest, cannot, we think, be questioned. The application of mind, rightly cultivated, to the subject of agriculture, cannot but lead to its improvement. In every branch of the operations of the farm, intelligence in the farmer can be applied with the most beneficial results. It cannot in truth be doubted that the course of education which is pursued at our higher seminaries of learning is not suited to qualify those who design to engage in the ordinary pursuits of life; and it is within the experience of every well informed man, that those who have come from our institutions loaded with honors, have often proved entirely unqualified for the common pursuits of life, and have been compelled to undergo another education to fit them for pursuits which require an education of a practical character, and an adaptation to the every-day business of our growing country. We need, then, an education which will fit a man for the every-day realities of life; and to accomplish this, an institution must be established for the cultivation of those practical sciences which will enable those who are to be the practical men of our country, to secure an education that will not only enable them rightly to discharge their duties in their profession or pursuit, but will at the same time fit them to occupy any station in the government of the state or nation equally with those who have been educated for professional life at our present institutions.

It cannot be doubted that many of the arts and sciences of the present day, which are claiming the attention of every well informed man, are the creation of our own times, and are not to be found in the systems of education established in by-gone ages, and which in the main remain now as they were established centuries ago. Chemistry, mineralogy, geology, botany, electricity, are almost all of our own time; at least they are within the recollection of our old men, many of whom can point to the day of their birth. Their importance, however, is beginning to be felt, and no man can be said to be thoroughly prepared to grapple with the requirements of this advancing age, unless practically acquainted with acquirements of modern date. All of these acquirements can be applied with most gratifying results to agriculture; and its advancement is to depend, in our judgment, upon facilities being afforded to attain that information which now is not to be attained by the great mass of the people. An institution which should have for its object the teaching of these and kindred branches connected with practical agriculture, is, in our opinion, demanded both by the wants and the desires of that all-important portion of our citizens, the agricultural and mechanical classes.

PEA BUGS.

Various remedies have been suggested to get rid of the pea bug, such as scalding the seed, putting it in bottles hermetically sealed, &c. The first has its objections, and the second retards the growth and exit of the bug until after planting time, but does not in all cases destroy it, unless more air is abstracted from the bottles than can well be done without apparatus. A certain way is, to gather in one year your seed peas for two, put them in separate bottles, and leave the bottles for the second year corked up until you want the peas to plant. Peas lose none of their vitality by being kept, (they have been found to grow when taken out of an Egyptian mummy,) and it is a question whether, like melon seed, they are not all the better for keeping. A. H.

MEADVILLE, PENN., 1848.

COVERING THE SOIL ABOUT FRUIT TREES.

I have noticed with interest the remarks of Mr. Cleveland and others in this journal on the subject of covering the surface of the soil with substances to keep it of a uniform state of moisture, &c.

I will add my mite in favor of this process. I adopted the same plan last spring, covering the ground with straw two inches deep, laying it down smoothly and closely beneath the trees for a space as large in diameter as the spread of the branches.

The result has so far exceeded my expectations, that I am tempted to believe that there must be some stimulating as well as protecting influence in the straw. I have gathered from a few quince and plum trees (the only ones to which the application was made) fruit of nearly double the size of that from other trees in the same soil; and the plums held their fruit better than I ever had any do before on my premises. Yours,

A CONSTANT READER.

PHILADELPHIA, *Jan.* 1849.

— *Downing's Horticulturist.*

AGRICULTURAL SCHOOL.

At Mount Airy, seven miles from Philadelphia, there is an agricultural institute, where agriculture is thoroughly taught on an experimental farm of seventy acres; and in addition to agriculture, instruction is given, by competent instructors, in the English elementary branches, in mathematics and physics, in elementary and analytical geology, in botany, zoölogy, and entomology.

DOG POWER.

The Scientific American contains a notice of a dog power, consisting of a wheel eleven feet in diameter, inside of which the dog works like a squirrel in his cage. The gudgeons turn on friction rollers. This power is applied to a circular saw, a lathe, and several other operations, such as churning, pumping, and washing. It is said to be much superior to the old one so long in use for churning.

BEWARE OF THE RING BONE.

If colts stand on a plank, or any hard floor that is not well littered, they will be subject to the ring bone. When breeding horses, we left the floor of the colts' stables of the soil over which they were built. If this should be a deep loam, or of a clayey texture, then remove the soil about two feet deep, and replace it with sand, or the finest gravel to be obtained. Colts should always be let out to exercise in a yard, or open space, every day, during the winter, when not particularly stormy; and in this yard there should not be older horses, or any horned cattle which can do them injury. Being very playful, they are more apt to provoke attacks upon them than other animals. — *American Agriculturist.*

For the New England Farmer.

SPRING.

Wake the glad echoes of pleasure and mirth!
Spring in her beauty revisits the earth!
On hill side and valley her footsteps are seen;
She spreads o'er earth's bosom a mantle of green.
'Tis Spring — glorious Spring.

List! what sweet music is filling the air!
See the pure flowerets so fragrant and fair!
Hear the glad voices of murmuring streams!
See the bright sun with his radiant beams.
'Tis Spring — beautiful Spring.

O, how my heart leaps in gladness to greet
Spring, with gay birds and fair blossoms replete:
With her soft, sighing winds and bright rivulets free,
There's no season so pleasant — so lovely to me,
As Spring — glorious Spring.

LEBANON, CT. E. C. L.

THE OLIO.

CHURCH PSALMODY. — For the benefit of many choirs who habitually drawl or jam their words so as to render them utterly unintelligible to the hearer, we give them a specimen of a line we heard sung once on a time.

READ. "Life is a shadow! — how it flies!"
SUNG. "Life is a *shad* — *O*, how it flies!"

"When I am dead," said Napoleon, "my soul will return to France, and dwell in the hearts of the French people, like thunder in the clouds of heaven, and throb with ceaseless strife in new revolutions."

The excesses of our youth are drafts upon our old age, payable with interest.

A cheerful spirit makes labor light and sleep sweet, and all around happy, which is much better than being only rich.

Profane language is to conversation what ten inch spikes would be to veneering — splitting, shivering, and defacing it. It is in bad taste, offensive to a majority, and gratifying to none.

In the space of 713 years, England and France were at war 262 years.

TERMS. — THE NEW ENGLAND FARMER is published every other Saturday, making a neat and handsome volume, at the close of the year, of 416 pages, at $1 a year, or five copies for $4, payable in advance. It may be neatly bound at 18¾ cents, or elegantly bound in muslin, embossed and gilt, at 25 cents a volume. As it is stereotyped, back numbers can be furnished to new subscribers.

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